

Status of Forest Insect Conditions-Boise  
Zone Résume' for INT. Forest Pest Action  
Council.

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CONDITIONS REPORT

STATUS OF FOREST INSECT CONDITIONS-BOISE ZONE  
RESUME' FOR INTERMOUNTAIN FORESTRY PEST ACTION COUNCIL

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November 7, 1974

STATUS OF FOREST INSECT CONDITIONS - BOISE ZONE  
RESUME' FOR INTERMOUNTAIN FOREST PEST ACTION COUNCIL

MOUNTAIN PINE BEETLE, *Dendroctonus ponderosae* Hopk.

Lodgepole Pine

For several years mountain pine beetle has attacked and killed large numbers of lodgepole pine on the Sawtooth National Forest. In addition, these stands are heavily infected with dwarfmistletoe. Overall stands are of low economic value as sawtimber. Attempts have been made to salvage or sell several sales at minimum stumpage. Due to market conditions little interest has been shown by industry. Land managers to date have not felt that values are sufficiently high to warrant requests for direct control action.

During aerial surveys this year, it was observed that heavy fading was occurring throughout most of the lodgepole type. This indicates increasing beetle populations which are expected to continue for at least another season.

On the northern division of the Sawtooth, the mountain pine beetle remains epidemic in Warm Springs Creek and its tributaries west of Ketchum, Idaho. Also, new attack areas and expansion of old areas were recorded along the North Fork Big Wood River from Ketchum to Galena Summit. Preferred host, larger d.b.h. trees are abundant and should provide suitable host material for continued beetle activity.

In the spring of 1971, direct control of a mountain pine beetle outbreak was undertaken in and around Wildhorse Campground, Challis National Forest. Over 400 infested trees were felled and burned. This year approximately 30 newly attacked trees were found, somewhat less than last year. This slow attrition of the stand is normal and provides firewood for the campers. The removal of these infested trees before the brood develops would help to keep losses at a low level.

Lodgepole and Ponderosa Pine

Currently mountain pine beetle is infesting both lodgepole and ponderosa pine stands from McCall, Idaho, southward into Round Valley for approximately 40 air miles. Infestations started along the North Fork of the Payette River south of McCall, then progressed southward to Cascade Reservoir from 1960 to 1965. The following year, 1966, new attacks were observed throughout valley lands in Long Valley. Since then, new infestations have occurred in Round Valley and killed trees can be found the entire length of both Round and Long Valleys.

A chronic infestation in stagnated second-growth ponderosa pine is continuing to kill trees on private lands southeast of Cascade, Idaho. Until the past two years, losses have been primarily in small d.b.h. trees. However, as these are becoming fewer in number, larger (10" d.b.h.) trees are being killed. Considerable numbers of host trees remain and the infestation is expected to continue for at least another year. To date, private land owners have done nothing to bring the infestation under control.

During the past two years, new fading has been detected in and around the town of McCall indicating a resurgence of activity in the old Payette River infestation.

DOUGLAS FIR BEETLE, Dendroctonus pseudotsugae Hopk.

Douglas fir beetle activity continued at about the same level as recorded in 1973. Attacks continue in widely scattered areas throughout the Boise, Payette, Salmon, Challis and Sawtooth National Forests. An example of infestation levels follows:

BOISE NATIONAL FOREST

Three Years - Douglas Fir Beetle Attack Centers

<u>No. Groups - 3-10 Trees</u>			<u>No. Groups - 10 or More Trees</u>		
<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
256	336	267	95	136	130

In 1974 the number of trees per attack center in groups of 10 or more trees increased slightly.

The Boise National Forest has determined that mature-overmature Douglas fir stands in a 20-mile band along the South Fork of the Payette River are incurring intolerable losses. Currently, helicopter sales are being considered for logging the extremely steep slopes. This type of management, should in a period of a few years, reduce beetle impacts and convert the stand to a healthy viable condition.

Overall, Douglas fir beetle populations remain low and fairly static throughout the Boise Zone.

PINE ENGRAVER BEETLES, Ips pini

In sharp contrast to the past few years, engraver beetles caused only nominal damage in 1974 throughout the Boise Zone. The 1973 lindane chemical spray program in three logging areas on the Boise Forest successfully controlled *Ips* populations. The increase marketability of small diameter pine prompted an increase in cutting in these stands of 10 to 14 inch diameter material. There was some fear that this increase in cutting might cause an increase in *ips* activity. Evaluations made during the summer indicate that such cutting followed by thinning in the noncommercial size material did not cause any increase in *ips* activity, but rather seems to have kept losses very low.

WESTERN SPRUCE BUDWORM, Choristoneura occidentalis

Since 1964, when over two and a quarter million acres of fir forests were defoliated, budworm populations have fluctuated markedly. In 1967, defoliation declined to slightly over 200,000 acres.

Defoliation predictions made in 1973 for 1974 defoliation were accurate for most areas.

The relatively new infestation that has developed around McCall, Idaho, spread southward throughout the Cascade Reservoir area. Egg mass surveys in the Cascade Reservoir, West Mountain area predict increasing defoliation in 1975. Elsewhere in the Boise Zone, egg mass surveys indicate static to decreasing trends.

Due to work schedules, considerable acreage on the Payette and Challis forests was not aerially surveyed. We feel there is a possibility some areas of defoliation went undetected.

In areas surveyed during 1974, approximately 340,000 acres of defoliation were recorded.

DOUGLAS FIR TUSSOCK MOTH, Hemerocampa pseudotsugae (McDonnough)

After a rather dramatic appearance in 1973, encompassing over 11,000 acres, tussock moth damage declined to near zero in 1974, except on about 1,000 acres near Fairfield that required spraying. Application of three-fourths pound DDT suppressed this population as well. The area left unsprayed because of virus levels indicated levels similar to unsprayed check areas. The chronic areas of infestation near Silver City and South Mountain, Owyhee County, Idaho, did not show any aerially visible damage. However, Douglas fir stands near Delamar Mountain are showing fairly heavy mortality. Extent of damage is not known as ground surveys have not been made.

PINE BUTTERFLY, Neophasia menapia (F.&F.)

This insect will be covered as a separate subject.